

RI STATE HEALTH LABORATORIES
CLINICAL SPECIMEN SUBMISSION GUIDANCE

ORGANISM
Arbovirus (EEE,SLE,WNV)
Babesia species
Bacillus anthracis
Bordetella pertussis
Brucella species
Burkholderia mallei
Burkholderia pseudomallei
Campylobacter sp.
Chlamydia psittaci
Chlamydia trachomatis
Clostridium botulinum
Corynebacterium diphtheriae
Coxiella burnetti
Creutzfeldt-Jacob disease
Cryptosporidium parvum
Cyclospora cayetanensis
Dengue virus, type 1,2,3, or 4
E.coli 0157:H7 and other toxin producing strains
Entamoeba histolytica
Ehrlichia/Anaplasma species
Francisella tularensis
Giardia lamblia
Haemophilus influenzae
Hantavirus
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
HIV
Influenza Virus

Lead – Whole Blood – Capillary
Lead – Whole Blood – Venous
Lead – Whole Blood – Diagnostic Venous
Legionella sp.
Listeria monocytogenes
Morbillivirus (Measles)
Mumps virus
Mycobacterium tuberculosis
Neisseria gonorrhea (culture)
Neisseria gonorrhea (NAAT)
Neisseria meningitidis
Norovirus
Plasmodium sp. (Malaria)
Rabies
Rickettsia prowazekii (Typhus)
Rickettsia rickettsii (Rocky Mountain Spotted Fever)
Rubella virus
Salmonella sp.
Salmonella typhi (Typhoid Fever)
Shigella sp.
Staphylococcus aureus, VRSA or VISA
Streptococcus pneumoniae
Streptococcus pyogenes (Group A Strep)
Treponema pallidum (Syphilis)
Variola virus (Smallpox)
Vibrio cholera
Vibrio parahaemolyticus
Vibrio vulnificus
Viral Hemorrhagic Fevers (Ebola, Lassa, Marburg)
Yersinia enterocolitica
Yersinia pestis

ARBOVIRUS

Lab & Phone #:	Serology (401) 222-5591
Organism Name:	<i>Arbovirus</i>
Disease:	Arboviral encephalitis
Description/Test:	An enzyme-linked immunosorbent capture assay to detect IgM antibodies to West Nile Virus. All other requests for arbovirus testing and confirmations are sent to CDC.
Specimen:	Minimum 5 ml serum in red top tube; minimum 2 ml cerebrospinal fluid (CSF) collected aseptically. Acute serum and CSF should be collected within the first 14 days following onset of symptoms
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Arbovirus (WNV)
Transport:	Refrigerate at 4° to 8° C and transport within 48 hours of collection on blue or wet ice. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.
Integrity:	Non-hemolyzed
Normal Value:	Negative
Turnaround Time:	5 business days

BABESIA SPECIES

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism name:	<i>Babesia species</i>
Disease:	Babesiosis
Description Test:	Detection and identification of blood parasites through microscopic examination of thin blood smears stained with Wright/Giemsa stain.
Specimen:	Submit thin blood smears stained with Wright/Giemsa stain. Stained thick smears may be submitted in addition to thin smears, but not instead of thin smears. Specimens must be labeled with the patient's name or other identifier such as the requisition form number label.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Blood Parasite ID/Confirmation
Transport:	Transport stained smears in cardboard or plastic slide carriers to the laboratory as soon as possible. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Integrity:	Thick stained blood smear received without a thin stained blood smear will not be read.
Normal Value:	No blood parasites observed
Turnaround Time:	2 business days

BACILLUS ANTHRACIS

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Bacillus anthracis*

Disease: Anthrax (inhalation, cutaneous, gastrointestinal)

Description/Test: PCR and culture to detect and confirm *B.anthraxis*

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401)222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR A POTENTIAL AGENT OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Isolate: If a lab is unable to rule out *B.anthraxis* after performing LRN Sentinel screening tests, isolate is to be submitted on either a slant or a culture plate sealed with parafilm (or other appropriate barrier film). If based on clinical history there is a strong index of suspicion for anthrax, labs may be requested by HEALTH to submit the original culture plate on the initial day of isolation.

Specimens: If based on clinical history, anthrax is suspected, specimens are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH Bioterrorism Laboratory for appropriate specimen selection and submit original specimen as soon as possible after collection. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Isolates: Special Pathogens Bacterial Isolate
Specimens: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to sending primary specimens. All submissions must be properly packaged in accordance with current federal

shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Bacillus anthracis*

Turnaround Time: PCR result within 24 hours.
Culture result within 48 hours

BORDETELLA PERTUSSIS

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Bordetella Pertussis*

Disease: Pertussis, Whooping cough

Description/Test: PCR and culture to detect and confirm *B. pertussis*

Specimen: Specimens: Nasopharyngeal specimen, right and left sides, collected on flexible wire calcium alginate tipped swabs (refer to specimen collection instructions). Submit in Regan-Lowe transport medium, both swabs are to be submitted in one tube.

Isolates: Submit freshly growing pure isolates on Regan-Lowe or Bordet Gengou agar plates. Seal plates with parafilm or other barrier film.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Specimens: Pertussis
Isolate: Write “confirm *B. pertussis*” in comment field on requisition form

Transport: Specimens: Within 24 to 48 hours of collection at ambient (room) temperature 25° to 30° C. If specimen transport is delayed beyond 48 hours, store the specimen in a refrigerator at 2° to 8° C until transport.

Isolates: At ambient temperature as soon as possible after isolation of suspect colonies.

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Integrity: Only nasopharyngeal specimens are accepted. Specimens received in excess of five days from collection will be rejected. Do not use Regan-Lowe transport tubes past their expiration date.

Normal Value: PCR: Negative for *B. pertussis*.
Culture: Culture negative for *B. pertussis*.

Turnaround Time: PCR: 1 business day.
Culture: 5-15 days (culture plates are held for 10 days before being reported as negative)

Kit:

Kits containing detailed collection instructions, transport media, and nasopharyngeal swabs are available at HEALTH Laboratories Central Receiving. Kits may be obtained Monday-Friday between 8:30 and 4:30. Media must be stored at 2° to 8° C until use.

BRUCELLA SPECIES

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Brucella species*

Disease: Brucellosis

Description/Test: PCR and culture to detect, confirm and speciate *Brucella sp.*
(Sera is shipped to CDC for serological testing)

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401) 222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR A POTENTIAL AGENT OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Isolate: If a lab is unable to rule out *Brucella sp.* after performing LRN Sentinel screening tests, isolate is to be submitted on either a slant or a culture plate sealed with parafilm (or other appropriate barrier film). If based on clinical history there is a strong index of suspicion for brucellosis, labs may be requested by HEALTH to submit the original culture plate on the initial day of isolation.

Clinical Specimens: If based on clinical history there is an index of suspicion for brucellosis, specimens are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH BT/SP Laboratory at (401) 222-5586 for appropriate specimen selection and submit original specimen as soon as possible after collection. HEALTH BT/SP Lab also forwards serum specimens to CDC for *Brucella sp.* serological testing. In addition to a HEALTH test requisition form, a CDC DASH Form must be completed and submitted with the specimen. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Form Required: Rhode Island State Health Laboratories test requisition form
CDC DASH Form is also required for serological testing

Test Request: Isolates: Special Pathogens Bacterial Isolate
Specimens: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to sending specimens or isolates. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Brucella sp*

Turnaround Time: PCR result within 24 hours.
Culture results are dependent on the growth rate of the organism.

BURKHOLDERIA MALLEI

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Burkholderia mallei*

Disease: Glanders

Description/Test: PCR and culture to detect *B.mallei*

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401)222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR A POTENTIAL AGENT OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Isolate: If a lab is unable to rule out *B. mallei* after performing LRN Sentinel screening tests, isolate is to be submitted on either a slant or a culture plate sealed with parafilm (or other appropriate barrier film). If based on clinical history there is a strong index of suspicion for glanders, labs may be requested by HEALTH to submit the original culture plate on the initial day of isolation.

Clinical Specimens: If based on clinical history there is an index of suspicion for glanders, specimens are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH Bioterrorism Laboratory for appropriate specimen selection and submit original specimen as soon as possible after collection. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Isolates: Special Pathogens Bacterial Isolate
Specimens: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to sending specimens or isolates. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Burkholderia mallei*

Turnaround Time: PCR result: within 24 hours.
Culture results: within 5 days of isolate receipt

BURKHOLDERIA PSEUDOMALLEI

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Burkholderia pseudomallei*

Disease: Melioidosis

Description/Test: PCR and culture to detect *B. pseudomallei*

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401)222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR A POTENTIAL AGENT OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Isolate: If a lab is unable to rule out *B.pseudomallei* after performing LRN Sentinel screening tests, isolate is to be submitted on either a slant or a culture plate sealed with parafilm (or other appropriate barrier film). If based on clinical history there is a strong index of suspicion for melioidosis may be requested by HEALTH to submit the original culture plate on the initial day of isolation.

Clinical Specimens: If based on clinical history there is an index of suspicion for melioidosis are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH Bioterrorism Laboratory for appropriate specimen selection and submit original specimen as soon as possible after collection. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Isolates: Special Pathogens Bacterial Isolate
Specimens: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to sending specimens or isolates. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Burkholderia pseudomallei*

Turnaround Time: PCR result: within 24 hours.
Culture results: within 5 days of isolate receipt

CAMPYLOBACTER SP.

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Campylobacter species*

Disease: Campylobacteriosis

Specimen: Pure isolate not more than 48 hours old submitted on Campy Blood Agar, Campy Thio, or Chocolate Agar transported in a Campy transport pack. Isolates on plated media must be sealed with parafilm or other appropriate barrier film and have isolated colonies.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*Campylobacter*" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture using a campy transport packet. Hold at ambient (room) temperature, 25° to 30° C.

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments.

Integrity: Isolates not received on stated media or without a campy pack will be discarded.

Normal Value: Negative for *Campylobacter sp.*

Turnaround Time: 14 days

CHLAMYDIA PSITTACI

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism name:	<i>Chlamydia psittaci</i>
Disease:	Ornithosis (Psittacosis)
Description Test:	Preauthorization from the HEALTH Division of Infectious Disease and Epidemiology is required (401) 222-2577. If testing is approved, specimens are sent from the HEALTH Special Pathogens Laboratory to the CDC for testing.
Specimen:	Consult with the HEALTH Special Pathogens Lab at (401) 222-5586 for guidance on specimen selection, collection and submission.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	CDC Sendout
Transport:	All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Unknown (testing performed by CDC)

CHLAMYDIA TRACHOMATIS

Lab & Phone #:	Serology	(401) 222-5591
Organism Name:	<i>Chlamydia trachomatis</i>	
Disease:	Chlamydia (genital) Chlamydia (ophthalmic/pneumonia)	
Description/Test:	Nucleic Acid Amplification	
Specimen:	Swab (endocervix, urethra, vagina) or urine. Follow instructions for collection printed on each collection kit. This test is only approved for specimens from the following sites: endocervix, vagina, urethra or urine. Specimens received from other sites will be rejected.	
Form Required:	Rhode Island State Health Laboratories test requisition form	
Test Request:	Chlamydia / Gonorrhea (cervical), Chlamydia / Gonorrhea (urethral), Chlamydia / Gonorrhea (urine), or Chlamydia / Gonorrhea (vaginal)	
Transport:	Specimen may be held at 2° to 30°C until transport. Specimen must be received within 60 days of collection. All submissions must be properly packaged in accordance with current federal shipping regulations.	
Integrity:	Specimens not received in approved collection kit will be rejected	
Normal Value:	Negative	
Turnaround Time:	3 business days	
Kit:	Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm. Test kit order forms can be faxed to (401)222-6985	

CLOSTRIDIUM BOTULINUM

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Clostridium botulinum*

Disease: Botulism

Description/Test: Specimens are sent by the HEALTH Laboratories for testing to either the CDC or another State's Health Department Laboratory that has this testing capacity. Testing may include DIG ELISA, PCR, culture and mouse bioassay to detect and confirm presence of C.botulinum toxin.

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE & EPIDEMIOLOGY AT (401)222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN / ISOLATE IS SUSPICIOUS FOR POTENTIAL AGENTS OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Clinical Specimens: If based on clinical history there is an index of suspicion for botulism, consult with the HEALTH Bioterrorism Response Laboratory ((401) 222-5586) for appropriate specimen selection and submit original specimen as soon as possible after collection. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Isolate: If a lab is unable to rule out *C.botulinum*, the isolate is to be submitted to the HEALTH Lab after consultation with the HEALTH Bioterrorism Response & Special Pathogens Lab ((401) 222-5586). If based on clinical history there is a strong index of suspicion for botulism, labs may be requested by HEALTH to submit the original culture plate on the initial day of isolation.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request:	<u>Isolates</u> : Special Pathogens Bacterial Isolate <u>Specimens</u> : Special Pathogens Primary Specimen
Transport:	Preauthorization is necessary prior to sending specimens or isolates. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.
Normal Value:	Negative for <i>Clostridium botulinum</i>
Turnaround Time:	Dependent on the reference lab performing the tests and which tests are performed.

COXIELLA BURNETII

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Coxiella burnetii*

Disease: Q Fever

Description/Test: PCR for detection of *C. burnetii*
(Sera is shipped to CDC for serological testing)

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401)222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR A POTENTIAL AGENT OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Clinical Specimens: If based on clinical history there is an index of suspicion for Q Fever; specimens are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH BT/SP Laboratory for appropriate specimen selection and submit original specimen as soon as possible after collection. HEALTH BT/SP Lab also forwards serum specimens to CDC for *C.burnetii* serological testing. In addition to a HEALTH test requisition form, a CDC DASH Form must be completed and submitted with the serum specimen. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Form Required: Rhode Island State Health Laboratories test requisition form
CDC DASH form is also required for serology testing requests

Test Request: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to sending specimens. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and

isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Coxiella burnetii*

Turnaround Time: PCR result within 24 hours

CORYNEBACTERIUM DIPHTHERIAE

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism Name:	<i>Corynebacterium diphtheriae</i>
Disease:	Diphtheria
Description/Test:	Isolation and identification of <i>C. diphtheriae</i>
Specimen:	Submit freshly growing, pure isolate subculture on appropriate media. If plated media is used, seal with parafilm or other appropriate barrier film.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	<u>Isolates</u> : Special Pathogens Bacterial Isolate Write “rule out <i>C.diphtheriae</i> ” or “confirm <i>C.diphtheriae</i> ” in comment field on requisition form <u>*Specimens</u> : Special Pathogens Primary Specimen Write “rule out <i>C.diphtheriae</i> ” in comment field on requisition form *HEALTH Special Pathogens Laboratory provides testing on primary specimens only with prior arrangement . For further information contact the Special Pathogens Laboratory at (401) 222-5586
Transport:	<u>Isolates</u> : 24 to 48 hours of subculture at ambient temperature 25° to 30° C. <u>Specimens</u> : Must be received on the day of collection. Call Special Pathogens Laboratory at (401) 222-5586 for specific instructions on collecting and transporting specimens. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Normal Value:	Negative for <i>Corynebacterium diphtheriae</i>
Turnaround Time:	72 hours

CREUTZFELDT-JACOB DISEASE

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Disease:	Creutzfeldt-Jacob Disease
Description Test:	Preauthorization from the HEALTH Division of Infectious Disease and Epidemiology is required ((401)222-2577) for testing. If testing is approved, specimens are sent from the HEALTH Special Pathogens Laboratory to the CJD Surveillance National Prion Disease Pathology Surveillance Center (NPDPSC). Further testing information, fees and required form(s) are available at www.cjdsurveillance.com
Specimen:	Consult with the HEALTH Special Pathogens Laboratory at (401) 222-5586 for guidance on specimen selection, collection and submission.
Form Required:	Rhode Island State Health Laboratories test requisition form CJD National Prion Disease Pathology Test Request Form
Test Request:	Special Pathogens Primary Specimen
Transport:	All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Unknown (testing performed by NPDPSC)

CRYPTOSPORIDIUM PARVUM

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism name: *Cryptosporidium parvum*

Disease: Cryptosporidiosis

Description/Test: Enzyme Immunoassay (EIA)

Special Instructions: **TESTING IS ONLY AVAILABLE FOR SPECIMENS WITH PRIOR APPROVAL THROUGH THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401) 222-2577.**

Specimen: Stool specimen in appropriate preservative. Fill collection container ¼ to ½ full. Unpreserved specimen is acceptable. Oocysts may be shed intermittently. Multiple stool specimens may be required for detection.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Ova & Parasite
Write "*Cryptosporidium*" in comment field on requisition form

Transport: Store at 2 to 8 °C and deliver to lab as soon as possible.

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments

Normal Value: Negative *Cryptosporidium*

Turnaround Time: 4 business days

Kit: Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday - Friday between 8:30am and 4:30 pm.

CYCLOSPORA CAYETANENIS

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Cyclospora cayetanensis*

Disease: Cyclosporiasis

Description/Test: Fluorescent microscopy

Special Instructions: **PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401)222-2577 IS REQUIRED PRIOR TO SPECIMEN SUBMISSION**

Specimen: Stool specimen in appropriate preservative. Fill collection container $\frac{1}{4}$ to $\frac{1}{2}$ full. Unpreserved specimen is acceptable. Oocysts may be shed intermittently. Multiple stool specimens may be required for detection.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Ova & Parasite
Write "*Cyclospora*" in comment field on requisition form

Transport: Store at 2 to 8 °C and deliver to lab as soon as possible

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric laboratory are available in all microbiology labs and laboratory send out departments

Normal Value: Negative *Cyclospora*

Turnaround Time: 4 business days

Kit: Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday - Friday between 8:30am and 4:30pm.

DENGUE FEVER

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism name:	Dengue viruses (1, 2, 3, 4)
Disease:	Dengue fever, Dengue Hemorrhagic Fever
Test:	Dengue testing is available from commercial laboratories. Consultation and approval from HEALTH Division of Infectious Disease and Epidemiology is required for testing by the CDC Dengue Lab (401) 222-2577. If testing is approved, human clinical specimens are sent from the HEALTH Special Pathogens Laboratory to the CDC for testing. Diagnostic testing at CDC depends on the specimen sent. Convalescent serum (collected >5 days after symptom onset is tested by ELISA for IgM. Acute serum (collected within 5 days of onset) is tested by PCR and an ELISA for IgG.
Specimen:	Submit serum (2ml minimum) only. Collect blood in red top tube centrifuge and send only the serum to the HEALTH Laboratory. Serum is to be stored refrigerated at 2° - 8° C and transported to the HEALTH Laboratory on wet or blue ice. Indicate on the test requisition form whether the serum is acute or convalescent.
Forms Required:	Rhode Island State Health Laboratories test requisition form CDC DASH Form CDC "Dengue Case Investigation Report"
Test Request:	CDC Sendout
Transport:	See "Specimen" information above. Contact the HEALTH Special Pathogens Lab (401) 222-5586 prior to transport. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Unknown (testing performed by CDC)

E. COLI 0157:H7 AND OTHER TOXIN PRODUCING STRAINS

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism name: *Escherichia coli* 0157:H7

Disease: *E.coli* 0157:H7 gastroenteritis

Description/Test: Genus and species identification of pathogenic isolates

Specimen: Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is preferred. Appropriate tubed media is also acceptable.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*E. coli* 0157:H7" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture at ambient (room) temperature 25° to 35° C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments.

Integrity: Pure isolate must be received

Normal Value: Negative for *E. coli* 0157:H7

Turnaround Time: Up to 14 business days

ENTAMOEBA HISTOLYTICA

Lab & Phone#: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism name: *Entamoeba histolytica*

Disease: Amebiasis

Description/Test: Enzyme Immunoassay (EIA)

Special Instructions: **PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401)222-2577 IS REQUIRED PRIOR TO SPECIMEN SUBMISSION**

Specimen: Stool specimen in appropriate preservative. Fill collection container $\frac{1}{4}$ to $\frac{1}{2}$ full. Unpreserved specimen is acceptable. Oocysts may be shed intermittently. Multiple stool specimens may be required for detection.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Ova & Parasite
Write "*Entamoeba histolytica*" in comment field on requisition form

Transport: Store at 2° - 8 °C and deliver to lab as soon as possible

Normal Value: Negative *Entamoeba histolytica*

Turnaround Time: 4 business days

Kit: Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30am and 4:30pm. Test kit order forms may be faxed to (401) 222-6985

EHRLICHIA / ANAPLASMA SPECIES

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism Name:	<i>E. chaffeensis</i> / <i>A. phagocytophilum</i>
Disease:	Ehrlichiosis / Anaplasmosis
Description/Test:	Detection and identification of blood parasites through microscopic examination of thin blood smears stained with Wright/Giemsa stain.
Specimen:	Submit thin blood smears stained with Wright/Giemsa stain. Stained buffy coat smears and thick smears may be submitted in addition to thin smears, but not instead of thin smears. Specimens must be labeled with the patient's name or other identifier such as the requisition form number label
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Blood Parasite ID/Confirmation
Transport:	Transport stained smears in cardboard or plastic slide carriers to the laboratory as soon as possible. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Integrity:	Thick stained blood smears received without a thin stained blood smear will not be tested
Normal Value:	No blood parasites observed
Turnaround Time:	2 business days

FRANCISELLA TULARENSIS

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Francisella tularensis*

Disease: Tularemia

Description/Test: PCR and culture to detect and confirm *F.tularensis*

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401) 222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR AGENTS OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>

Isolate: If a lab is unable to rule out *F. tularensis* after performing LRN Sentinel screening tests, isolate is to be submitted on either a slant or a culture plate sealed with parafilm (or other appropriate barrier film). If based on clinical history there is a strong index of suspicion for tularemia, labs may be requested by HEALTH to submit the original culture plate on the initial day of isolation.

Clinical Specimens: If based on clinical history, tularemia is suspected, specimens are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH Bioterrorism Laboratory for appropriate specimen selection and submit original specimen as soon as possible after collection. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Isolates: Special Pathogens Bacterial Isolate
Specimens: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to sending specimens or isolates. All submissions must be properly packaged in accordance with current federal

shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Francisella tularensis*

Turnaround Time: PCR result within 24 hours.
Culture result within 72 hour (dependent on growth rate)

GIARDIA LAMBLIA

Lab & Phone #:	Molecular Diagnostics & Enteric Pathogens (401) 222-5538
Organism name:	<i>Giardia lamblia</i>
Disease:	Giardiasis
Description/Test:	Enzyme Immunoassay (EIA)
Special Instructions:	PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (410)222-2577 IS REQUIRED PRIOR TO SPECIMEN SUBMISSION
Specimen:	Stool specimen in appropriate preservative. Fill collection container ¼ to ½ full. Unpreserved specimen is acceptable. Oocysts may be shed intermittently. Multiple stool specimens may be required for detection.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Ova & Parasite Write “ <i>Giardia lamblia</i> ” in comment field on requisition form
Transport:	Store at 2° - 8 °C and deliver to lab as soon as possible
Normal Value:	Negative <i>Giardia lamblia</i>
Turnaround Time:	4 business days
Kit:	Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30am - 4:30 pm. Test kit order forms may be faxed to (401) 222-6985

HAEMOPHILUS INFLUENZAE

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Haemophilus influenzae*

Disease: H. influenzae

Description/Test: *H. influenzae* confirmation and serotyping

Specimen: Submit freshly growing, pure isolate from invasive disease/normally sterile site on a chocolate agar slant secured with a screw cap. If plated media is used, seal plate with parafilm or other appropriate barrier film.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Special Pathogens Bacterial Isolate
Write "*H. influenzae*" in comment field of requisition form

Transport: As soon as possible at ambient temperature 25° to 30° C.

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Confirmation and serotype within 72 hours

HANTAVIRUS

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Hantavirus*

Disease: Hantavirus Pulmonary Syndrome (HPS)

Specimen: **PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401)222-2577 IS REQUIRED PRIOR TO SPECIMEN COLLECTION AND SUBMISSION.**

Contact the HEALTH Bioterrorism Response and Special Pathogens Laboratory (401) 222-2256 for specific specimen collection instructions and specialized submission forms.

Test: If testing is approved, specimens are sent from the HEALTH Special Pathogens Laboratory to the CDC for testing. Diagnostic testing at CDC depends on the specimen sent and may include serology, immunohistochemistry, PCR, and virus isolation.

Forms Required: Rhode Island State Health Laboratories test requisition form
CDC DASH Form
CDC "Hantavirus Pulmonary Syndrome Case Report Form"

Test Request: CDC Sendout

Transport: Contact the HEALTH Special Pathogens Lab (401) 222-5586 **prior** to transport. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Unknown (testing performed by CDC)

HEPATITIS A VIRUS

Lab & Phone #:	Serology (401) 222-5591
Organism name:	<i>Hepatitis A virus</i>
Disease:	Hepatitis A
Description /Test:	Two-step immunoassay for the qualitative detection of IgM anti-HAV in human serum and plasma using CMIA technology
Specimen:	Minimum 5ml serum or plasma
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Hepatitis A IgM
Transport:	Transport as soon as possible. Specimen can be stored at 2° - 8°C for up to one week. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.
Integrity:	Non-hemolyzed
Normal Value:	Negative
Turnaround Time:	Routine is up to 2 weeks. STAT testing may be requested by contacting the laboratory directly at (401) 222-5591

HEPATITIS B VIRUS

Lab & Phone #: Serology (401) 222-5591

Organism Name: *Hepatitis B virus*

Disease: Hepatitis B

Description/Test: Two-step immunoassay for the qualitative detection of Hepatitis B antigen and antibodies

Specimen: Minimum 5ml serum or plasma

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Hepatitis B Core IgM, Hepatitis B Total Core, Hepatitis Surface Antibody, Hepatitis B Surface Antigen

Transport: As soon as possible. Specimen can be stored at 2° - 8° C for up to one week.

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.

Integrity: Non-hemolyzed

Normal Value: Negative

Turnaround Time: Routine is up to 2 weeks. STAT testing may be requested by contacting the laboratory directly at (401) 222-5591

HEPATITIS C VIRUS

Lab & Phone #: Serology (401) 222-5591

Organism name: *Hepatitis C virus*

Disease: Hepatitis C

Description/Test: Two-step immunoassay for the qualitative detection of Hepatitis C antibodies

Specimen: Minimum 5ml serum or plasma

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Hepatitis C

Transport: Transport as soon as possible. Specimens may be stored at 2° - 8°C for up to one week.

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.

Integrity: Non-hemolyzed

Normal value: Negative

Turnaround Time: Routine is up to 2 weeks. STAT testing may be requested contacting the laboratory directly at (401) 222-5591

HUMAN IMMUNODEFICIENCY VIRUS (HIV), 1 AND 2/p24 ANTIGEN

Lab & Phone #: Serology (401) 222-5591

Organism name: *Human Immunodeficiency Virus (HIV 1 and 2)*

Description/Test: Screen – A chemiluminescent microparticle immunoassay (CMIA) for the simultaneous qualitative detection of human immunodeficiency virus (HIV), p24 antigen and antibodies to HIV type 1 (HIV-1 group M and group O) and/or type 2 (HIV-2) in human serum and plasma (EDTA and heparin)

Confirmation – (Antigen): In vitro nucleic acid assay system for the detection of human immunodeficiency virus (HIV-1).

(Antibody): Immunoassay to detect and differentiate antibodies to Human Immunodeficiency Virus Types 1 and 2 (HIV-1, HIV-2)

Specimen: Minimum 5ml serum or plasma. **FOR CONFIRMATION TESTING: ORIGINAL SPECIMEN MUST BE RECEIVED.**

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: HIV

Transport: Transport as soon as possible. Stable at 2 ° - 8 °C for one week

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.

Integrity: Non-hemolyzed

Normal Value: Negative

Turnaround Time: Screen: 2 business days
Confirmation: 5 business days

Special Instructions: **HEALTH CARE WORKER EXPOSURES WILL BE EXPEDITED; CONTACT SEROLOGY FOR ADDITIONAL INSTRUCTIONS AT (401) 222-5591**

INFLUENZA VIRUS

Lab & Phone #: Molecular Diagnostic & Enteric Pathogens (401) 222-5538

Organism Name: *Influenza Virus*

Disease: Influenza

Description/Test: RT-PCR for detection of Influenza

Special Instructions: **SPECIMENS ARE ACCEPTED FROM DESIGNATED RI SENTINAL SITES THAT ARE APPROVED BY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401) 222-2577.**

PREAUTHORIZATION MUST BE OBTAINED FROM THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY PRIOR TO ALL OTHER LABORATORIES SENDING SPECIMENS.

Specimen: Refer to the Influenza Sentinel Protocol for appropriate specimen selection and testing. This protocol is available at all designated influenza sentinel testing sites

After specimen is obtained, place in viral transport medium and refrigerate until transport.

**Clinical Specimens: must be submitted in Viral Transport Medium:
Specimen Type:**

Nasopharyngeal swabs (swab must be included in the tube)
Oropharyngeal (Throat) swabs (swab must be included in the tube)
A combination of the NP and Throat swab together

**Submit the following in Viral Transport Medium (VTM)
(dilute specimen 1:2 with VTM)**

Nasal Aspirate
Bronchoalveolar Lavage
Tracheal (Endotracheal) aspirate

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Write "FLU" in comment field on requisition form.

Transport: Preauthorization is necessary prior to sending specimens from sites that are not part of the RI Department Of Health Influenza Sentinel Program.

Transport maintaining refrigerated temperature conditions by surrounding

specimen with blue or wet ice. If unable to transport within 72 hours, the specimen must be aliquoted and frozen at -70°C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments.

Normal Value: PCR Negative for Influenza A and B

Turnaround Time: PCR result within 24 hours

LEAD, WHOLE BLOOD, CAPILLARY FINGERSTICK

Lab & Phone #:	Biomonitoring (401) 222-5552
Description/Test:	Graphite furnace atomic absorption spectrophotometer
Specimen:	Quantitative screening test of lead in blood of children under age 6. Collect 300 µL of whole blood in capillary tube.
Form Required:	Rhode Island State Health Laboratories test requisition form.
Test Request:	Lead Screen (Fingerstick)
Transport:	Stable at 2° - 8° C for one month.
Integrity:	Clotted blood is unacceptable
Normal Value:	Children: 0 to 9 µg/dL
Turnaround Time:	5 business days
Kit:	Kits are available from the HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm. Test kit order forms can be faxed to (401) 222-6985

LEAD, WHOLE BLOOD, VENOUS

Lab & Phone #:	Biomonitoring (401) 222-5552
Description/Test:	Graphite furnace atomic absorption spectrophotometer
Specimen:	Quantitative screening test of lead in blood of children under age 6. Collect 300 µL of whole blood in EDTA (purple top) tube or heparin (green top) tube.
Form Required:	Rhode Island State Health Laboratories test requisition form.
Test Request:	Lead Screen (Venous)
Transport:	Stable at 2° - 8° C for one month.
Integrity:	Clotted blood is unacceptable
Normal Value:	Children: 0 to 9 µg/dL Adults: 0 to 40 µg/dL
Turnaround Time:	5 business days
Kit:	Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm. Test kit order forms can be faxed to (401) 222-6985.

LEAD, WHOLE BLOOD, DIAGNOSTIC (FOR CHILDREN)

Lab & Phone #:	Biomonitoring (401) 222-5552
Description/Test:	Graphite furnace atomic absorption spectrophotometer
Specimen:	Quantitative blood lead test to confirm childhood lead poisoning. <u>Only venous specimens will be accepted for diagnostic testing.</u> Collect 300 µg/dL whole blood in EDTA (purple top) tube.
Form Required:	Rhode Island State Health Laboratories test requisition form.
Test Request:	Lead Diagnostic (venous only)
Transport:	Stable at 2 - 8° C. Transport as soon as possible in separate package clearly labeled "Priority Lead – Diagnostic".
Integrity:	Clotted specimens are unacceptable
Normal Value:	Children: 0 to 9 µg/dL
Turnaround Time:	2 business days
Kit:	Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm. Test kit order forms can be faxed to (401) 222-6985

LEGIONELLA PNEUMOPHILA

Lab & Phone #:	Bioterrorism Response/Special Pathogens (401) 222-5586
Organism name:	<i>Legionella pneumophila</i>
Disease:	Legionellosis
Description/Test:	Confirmation of <i>L. pneumophila</i> is performed at CDC.
Specimen:	Pure isolate (<48 hrs old subculture) received on a slant of appropriate media secured with a screw cap. Isolates on plated media are acceptable if plates are sealed with parafilm or other appropriate barrier film.
Form Required:	Rhode Island State Health Laboratories test requisition form. CDC DASH Form
Test Request:	Special Pathogens Bacterial Isolate Write "Confirm <i>L. pneumophila</i> " in comment field on requisition form
Transport:	Transport at ambient temperature as soon as possible after identification/isolation. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Unknown (testing performed at CDC)

LISTERIA MONOCYTOGENES

Lab & Phone#:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism name:	<i>Listeria monocytogenes</i>
Disease:	Listeriosis
Description/Test:	Confirmation of <i>L. monocytogenes</i> & PFGE analysis
Specimen:	Freshly growing pure isolate received in a screw capped slant of appropriate media. Isolates on plated media are acceptable if plates are sealed with parafilm or other appropriate barrier film.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Special Pathogens Bacterial Isolate Write " <i>L. monocytogenes</i> " in the comment field of the requisition form.
Transport:	Transport at ambient temperature as soon as possible after identification. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Isolate identification confirmation within 48 hours PFGE results are entered into the national PFGE database

MORBILLIVIRUS (MEASLES)

Lab & Phone #: Serology (401) 222-5591

Organism Name: *Measles virus*

Disease: Measles

Special Instructions: **PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401)222-2577 IS REQUIRED PRIOR TO SPECIMEN SUBMISSION. SPECIMENS ARE SENT TO CDC FOR TESTING.**

Test: Testing performed by the CDC

Specimen: Minimum 2ml serum

Transport: Transport as soon as possible after collection. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.

Form Required: Rhode Island State Health Laboratories test requisition form
CDC Dash Form

Test Request: CDC Sendout
Write "Measles" under comment field on requisition form

Turnaround Time: Unknown (testing performed at CDC)
Sent out within 1 business day

MUMPS VIRUS

Lab & Phone #:	Serology (401) 222-5591
Organism name:	<i>Mumps virus</i>
Disease:	Mumps
Special Instructions:	PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401)222-2577 IS REQUIRED PRIOR TO SPECIMEN SUBMISSION. SPECIMENS ARE SENT TO CDC FOR TESTING.
Specimen:	Blood – 3 to 8 ml in 16 x 100 red top tube or a minimum of 2 ml of separated serum
Form Required:	Rhode Island State Health Laboratories test requisition form CDC Dash Form
Test Request:	CDC Sendout. Write “Mumps” in comment field of requisition
Transport:	Stable at 2° - 8 °C for one week. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.
Normal Value:	The presence of IgM class antibodies or a fourfold or greater rise in paired sera IgG titer indicates recent infection. The presence of demonstrable IgG generally indicates past exposure and immunity
Turnaround Time:	Unknown (testing performed at CDC) Sent out within 1 business day

MYCOBACTERIUM TUBERCULOSIS

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Mycobacteriology Section: (401)222-5587

Organism Name: *Mycobacterium tuberculosis*

Disease: Tuberculosis (TB)

Description/Test: Specimens: Smear (fluorochrome stain) for presence of acid fast bacilli and culture (liquid and solid media) for presence of *Mycobacterium sp.* Nucleic acid amplification testing (NAAT) is available for specimens meeting the criteria for testing. NAAT is reflexively ordered for all new smear positive patients with no known history of tuberculosis.

Isolates: Identification/speciation by nucleic acid (DNA) probe or biochemical profile. Isolates that can't be speciated by the HEALTH laboratory and meet the criteria for identification by CDC are forwarded to CDC for identification by molecular means (16s sequencing).

Drug Susceptibility Testing: Performed on isolates of *M.tuberculosis* only. Susceptibility testing on other clinically significant *Mycobacterium sp.* is available by special request; contact the Mycobacteriology section of the Special Pathogens Lab at (401) 222-5587 for more information.

Specimen: Specimens: Refer to Rhode Island State Health Laboratories "Guide to Mycobacteriology Laboratory Services" under the section: "Specimen Collection and Transport"

Isolate: 4 ml liquid media (Lowenstein Jensen slant or Middlebrook 7H-10 7H-11 slant/plate is also acceptable)

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Specimens: AFB Smear & Culture
Isolates: AFB Identification

Transport: Refer to Rhode Island State Health Laboratories "Guide to Mycobacteriology Laboratory Services" under the section: "Specimen Collection and Transport"

All specimens and isolates must be in leak proof containers with properly fastened screw caps. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Mycobacteriology Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the

definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Values: Smear: No AFB seen in smear
 Culture: Culture negative for Mycobacteria
 NAAT: PCR negative for *M. tuberculosis* complex

Turnaround Time: Smear: within 1 working day of specimen receipt
 NAAT: within 2 working days
 Culture: culture plates are held for 8 weeks before being reported as negative for growth of Mycobacteria species
 Isolate identification: dependent on method of identification. DNA probe testing is performed within 1 working day of isolate receipt
 Antibiotic Susceptibility: 10-21 days from isolation and identification of *M.tuberculosis*

Kits: Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm. Test order forms can be faxed to (401) 222-6985

NEISSERIA GONORRHOEAE (culture)

Lab & Phone #: Molecular Diagnostic & Enteric Pathogens (401) 222-5538

Organism Name: *Neisseria gonorrhoeae*

Disease: Gonococcal Infection

Description/Test: *N. gonorrhoeae*

Specimen: **PRIMARY CULTURES ARE ONLY ACCEPTED FROM STATE DESIGNATED CLINICS.** Primary specimen taken from rectal or throat (non-urogenital site) and inoculated onto Martin Lewis or Thayer Martin Plate. Sub plate immediately after specimen collection and incubate within 15 minutes of media inoculation at 35° C (+/-2°C) in CO2 atmosphere.

Isolates for confirmation can be sent on Martin Lewis or Thayer Martin.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Gonorrhea Culture

Transport: Transport at ambient temperature within 48 hours in bag containing CO2 tablet.

Isolates from Hospitals: All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Screening complete within 72 hours.

NEISSERIA GONNORRHEA

Lab & Phone #:	Serology (401) 222-5591
Organism Name:	<i>Neisseria gonorrhoeae</i>
Disease:	Gonococcal infection
Description/Test:	Nucleic Acid Amplification
Specimen:	Swab (endocervix, urethra, vagina) or urine. Follow instructions for collection printed on each collection kit. This test is only approved for specimens from the following sites: endocervix, vagina, urethra or urine. Specimens received from other sites will be rejected.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Chlamydia / Gonorrhea (cervical), Chlamydia / Gonorrhea (urethral), Chlamydia / Gonorrhea (urine), Chlamydia / Gonorrhea (vaginal)
Transport:	Specimen may be held at 2° - 30° C until transport. Specimen must be received within 60 days of collection. All submissions must be properly packaged in accordance with current federal shipping regulations.
Integrity:	Specimens not received in approved collection kit will be rejected
Normal Value:	Negative
Turnaround Time:	3 business days
Kit:	Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm. Test kit order forms can be faxed to (401) 222-6985

NEISSERIA MENINGITIDIS

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism Name:	<i>Neisseria meningitidis</i>
Disease:	Meningococcal disease (invasive)
Description/Test:	<i>N. meningitidis</i> confirmation and serogrouping
Specimen:	Pure isolate (<48 hr. old subculture) from invasive disease/normally sterile site. Send on a slant of chocolate agar secured with a screw cap. Isolates on plated media are acceptable if plates are sealed with parafilm or other appropriate barrier film.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Special Pathogens Bacterial Isolate Write " <i>N. meningitidis</i> " in comment field of requisition form
Transport:	Transport at ambient temperature as soon as possible after identification. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Isolate confirmation and serogroup reported within 72 hours.

NOROVIRUS

Lab & Phone #:	Molecular Diagnostics & Enteric Pathogens (401) 222-5538
Organism Name:	
Special Instructions:	PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401) 222-6985 IS REQUIRED PRIOR TO SPECIMEN SUBMISSION.
Description/Test:	Polymerase Chain Reaction – RNA in stool
Specimen:	Minimum 2 ml of stool specimen in clean vial without preservative preferred. Specimens in Cary-Blair collection vials are acceptable.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Write “Norovirus” under comment field on requisition form
Transport:	Transport within 24 hours of collection. Hold at 2° - 8 °C until transport.
Normal Value:	Negative for Norovirus
Turnaround Time:	24 hours to 2 business days
Kit:	Kits are available at HEALTH Laboratories Central Receiving and may be obtained Monday – Friday between 8:30 am and 4:30 pm.

ORTHOPOX VIRUSES (variola, vaccinia, monkeypox, cowpox)

Lab & Phone #:	Molecular Diagnostics & Enteric Pathogens (401)222-5538
Organism Name:	Variola virus, vaccinia virus, monkeypox virus, cowpox virus
Diseases include:	Smallpox, vaccinia, monkeypox, cowpox
Description/Test:	<p>Real time PCR testing is conducted at the RI Health Laboratories on specimens from patients meeting the definition of low to moderate risk of having smallpox. Specimens from patients who have a clinical history consistent with a “high risk” of smallpox are sent from the RI Health Laboratories to a laboratory that has the capacity to identify variola virus (CDC or the NY State Health Department Laboratory). The CDC “Acute, Generalized Vesicular or Pustular Rash Illness Protocol” algorithm is used to determine smallpox risk. The algorithm can be found on the CDC website at the following link:</p> <p>http://emergency.cdc.gov/agent/smallpox/diagnosis/pdf/poxalgorithm11-14-07.pdf</p>
Special Instructions:	<p>CONSULTATION AND APPROVAL FROM RI HEALTH DIVISION OF INFECTIOUS DISEASE & EPIDEMIOLOGY IS REQUIRED <u>PRIOR</u> TO SPECIMEN COLLECTION (401)222-2577.</p>
Specimen:	Extensive and detailed specimen collection instructions are provided in the specialized “Smallpox Collection Kit”
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Special Pathogens Primary Specimen
Transport:	All specimens must be received in a “RI State Health Laboratories Smallpox Collection and Transport Kit”. These kits have been provided to hospital microbiology laboratories. Follow the instructions for specimen transport provided in the kit. All submissions must be properly packaged in accordance with current federal shipping regulations.
Integrity:	Strict adherence to the specimen collection instructions provided in the specialized collection and transport kit.
Normal Value:	PCR negative for non-variola orthopox PCR negative for orthopox Electron Microscopy (optional) negative for poxvirus
Turnaround Time:	PCR result within 24 hours

Kit:

Specialized “Smallpox Collection & Transport Kits” are available in hospital microbiology laboratories. Detailed specimen collection and transport instructions are included in the kit.

PLASMODIUM SPECIES

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism Name:	<i>Plasmodium species</i>
Disease:	Malaria
Description/Test:	Detection, identification and speciation of blood parasites through microscopic examination of thin blood smears stained with Wright/Giemsa stain.
Specimen:	Submit thin blood smears stained with Wright/Giemsa stain. Stained thick smears may be submitted in addition to thin smears, but not instead of thin smears. Specimens must be labeled with the patient's name or other identifier such as the requisition number label.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Blood Parasite ID/Confirmation
Transport:	Transport stained smears in cardboard or plastic slide carriers to laboratory as soon as possible. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Integrity:	Thick stained blood smear received without a thin stained blood smear will not be tested.
Normal Value:	No blood parasites observed
Turnaround Time:	2 business days

RABIES VIRUS

Lab & Phone #:	Bioterrorism Response& Special Pathogens (human) (401) 222-5586 Water Microbiology (for animal testing) (401) 222-5588
Organism Name:	<i>Rabies virus</i>
Disease:	Rabies
Test:	PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401) 222-2577 IS REQUIRED PRIOR TO SPECIMEN COLLECTION AND SUBMISSION. If testing is approved, human clinical specimens are sent from the HEALTH Special Pathogens Laboratory to the CDC for testing.
Specimen:	HUMAN: PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401) 222-2577 IS REQUIRED PRIOR TO SPECIMEN COLLECTION AND SUBMISSION Specific specimens, specimen collection methods and specimen transport conditions are required for this test.
Forms Required:	Rhode Island State Health Laboratories test requisition form CDC DASH Form CDC “Possible Human Rabies – Patient Information Form”
Test Request:	CDC Sendout
Transport:	See “Specimen” information above. Contact the HEALTH Special Pathogens Lab (401) 222-5586 prior to transport. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Unknown (testing performed by CDC)

RICKETTSIA PROWAZEKII

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Rickettsia prowazekii*

Disease: Typhus

Description Test: **PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401) 222-2577 IS REQUIRED PRIOR TO SPECIMEN COLLECTION AND SUBMISSION.** If testing is approved, specimens are sent from the HEALTH Special Pathogens Laboratory to the CDC for testing.

Specimen: Consult with the HEALTH Special Pathogens Lab (401) 222-5586 for guidance on specimen selection, collection and submission.

Form Required: Rhode Island State Health Laboratories test requisition form
CDC DASH Form

Test Request: CDC Sendout

Transport: All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Unknown (testing performed by CDC)

RICKETTSIA RICKETTSII

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Rickettsia rickettsii*

Disease: Rocky Mountain Spotted Fever

Description Test: **PREAUTHORIZATION BY THE HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401) 222-2577 IS REQUIRED PRIOR TO SPECIMEN COLLECTION AND SUBMISSION.** If testing is approved, specimens are sent from the HEALTH Special Pathogens Laboratory to the CDC for testing.

Specimen: Consult with the HEALTH Special Pathogens Lab (401) 222-5586 for guidance on specimen selection, collection and submission.

Form Required: Rhode Island State Health Laboratories test requisition form
CDC DASH Form

Test Request: CDC Sendout

Transport: All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Unknown (testing performed by CDC)

RUBELLA VIRUS

Lab & Phone #:	Serology (401) 222-5591
Organism Name:	<i>Rubella virus</i>
Disease:	Rubella
Test:	Testing performed by the CDC
Specimen:	Minimum 2ml serum
Transport:	Transport as soon as possible after collection. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.
Form Required:	Rhode Island State Health Laboratories test requisition form CDC Dash Form
Test Request:	CDC Sendout Write "Rubella IgG" in comment field on requisition form
Turnaround Time:	Unknown (testing performed at CDC) Sent out within 1 business day

SALMONELLA SPECIES

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Salmonella species*

Disease: Salmonellosis gastroenteritis

Description/Test: Genus and species identification of pathogenic isolates

Specimen: Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is preferred. Appropriate tubed media is also acceptable.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*Salmonella*" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments

Integrity: Pure isolate must be received

Normal Value: Negative for *Salmonella*

Turnaround Time: Up to 14 business days

SALMONELLA TYPHI

Lab & Phone #:	Molecular Diagnostics & Enteric Pathogens	(401) 222-5538
Organism Name:	<i>Salmonella typhi</i> , Group D	
Disease:	Typhoid fever	
Description/Test:	Genus and species identification of pathogenic isolates	
Specimen:	Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is <u>preferred</u> . Appropriate tubed media is also acceptable.	
Form Required:	Rhode Island State Health Laboratories test requisition form	
Test Request:	Enteric Pathogen Isolate Write “ <i>Salmonella typhi</i> ” in comment field on requisition form	
Transport:	Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments	
Integrity:	Pure isolate must be received	
Normal Value:	Negative for <i>Salmonella typhi</i>	
Turnaround Time:	Up to 14 business days	

SHIGELLA SPECIES

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Shigella species*

Disease: Shigellosis gastroenteritis

Description/Test: Genus and species identification of pathogenic isolates

Specimen: Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is preferred. Appropriate tubed media is also acceptable.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*Shigella*" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments

Integrity: Pure isolate must be received

Normal Value: Negative for *Shigella*

Turnaround Time: Up to 14 business days

STAPHYLOCOCCUS AUREUS (VRSA/VISA)

Lab & Phone #:	Bioterrorism Response & Special Pathogens Lab (401) 222-5586
Organism name:	<i>Staphylococcus aureus</i> , with a vancomycin susceptibility result of intermediate or resistant
Disease:	Staphylococcal infection
Description/Test:	Testing to confirm vancomycin susceptibility is performed at CDC.
Specimen:	Pure isolate (<48 hrs old subculture) received on a slant of appropriate media secured with a screw cap. Isolates on plated media are acceptable if plates are sealed with parafilm or other appropriate barrier film.
Form Required:	Rhode Island State Health Laboratories test requisition form. CDC DASH Form Copy of drug susceptibility testing results
Test Request:	Special Pathogens Bacterial Isolate Write “VRSA” or “VISA” in comment field on requisition form
Transport:	Transport at ambient temperature as soon as possible after susceptibility testing is completed. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.
Turnaround Time:	Unknown (testing performed at CDC)

STREPTOCOCCUS PNEUMONIAE

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Streptococcus pneumoniae*

Disease: Pneumococcal disease (invasive)

Description/Test: MIC (performed by CDC)

Specimen: Only isolates from invasive disease/normally sterile site that are penicillin resistant by oxacillin disk screen and have **not** had a MIC performed. Submit a freshly growing pure isolate (< 48 hours old) on a chocolate agar slant secured with a screw cap. Isolates on plated media are acceptable if plates are sealed with parafilm or other appropriate barrier film.

Form Required: Rhode Island State Health Laboratories test requisition form
CDC DASH Form

Test Request: Special Pathogens Bacterial Isolate
Write "*S. pneumoniae*" in comment field of requisition form

Transport: All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Unknown (testing performed at CDC)

STREPTOCOCCUS PYOGENES (GROUP A STREP)

Lab & Phone #: Bioterrorism Response & Special Pathogens Lab (401) 222-5586

Organism Name: *Streptococcus pyogenes*, (Group A Strep)

Disease: Group A Streptococcal disease (invasive)

Test: No testing performed unless requested through and approved by HEALTH Division of Infectious Disease and Epidemiology (401) 222-2577. Isolates are banked at the HEALTH Laboratory pending potential further testing to support epidemiological investigations.

Specimen: Pure isolate (<48 hrs. old) from normally sterile site. Submit on a slant of appropriate media secured with a screw cap. Isolates on plated media are acceptable if plates are sealed with parafilm or other appropriate barrier film.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Special Pathogens Bacterial Isolate.
Write "*S. pyogenes*" in comment field of requisition form

Transport: All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments.

Turnaround Time: Not applicable

TREPONEMA PALLIDUM

Lab & Phone #:	Serology (401) 222-5591
Organism Name:	<i>Treponema pallidum</i>
Disease:	Syphilis (primary, secondary, early latent, late latent)
Description/Test:	Fluorescent Treponemal Antibody – Absorption (FTA-ABS) test to confirm all reactive RPR tests or VDRL on spinal fluid.
Specimen:	Blood – 3 to 8 ml in red top tube or 2 ml serum. Minimum 0.5 ml centrifuged cerebrospinal fluid.
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	Syphilis FTA-ABS – Blood /Serum VDRL - CSF
Transport:	Refrigerate at 2° - 8° C and transport within 24 to 48 hours of collection. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens to the HEALTH Serology Laboratory are available in all hospital laboratories.
Integrity:	Stable at 2° - 8° C for one week.
Normal Value:	Non-reactive
Turnaround Time:	5 business days

VIBRIO CHOLERAЕ 01 or 0139

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Vibrio cholerae 01 or 0139*

Disease: Cholera

Description/Test: Genus and species identification of pathogenic isolates

Specimen: Pure isolate not more than 48 hours old on plated media sealed with parafilm or other appropriate barrier film is preferred. Tuber media is also acceptable.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*Vibrio cholerae*" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments

Integrity: Pure isolate must be received

Normal Value: Negative for *Vibrio*

Turnaround Time: Up to 14 business days

VIBRIO PARAHAEMOLYTICUS

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Vibrio parahaemolyticus*

Disease: Vibriosis

Description/Test: Genus and species identification of pathogenic isolates

Specimen: Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is preferred. Appropriate tubed media is also acceptable.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*Vibrio parahaemolyticus*" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments

Integrity: Pure isolate must be received

Normal Value: Negative for *Vibrio*

Turnaround Time: Up to 14 business days

VIBRIO VULNIFICUS

Lab & Phone #:	Molecular Diagnostics & Enteric Pathogens	(401) 222-5538
Organism Name:	<i>Vibrio vulnificus</i>	
Disease:	Vibriosis	
Description/Test:	Genus and species identification of pathogenic isolates	
Specimen:	Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is <u>preferred</u> . Appropriate tubed media is also acceptable.	
Form Required:	Rhode Island State Health Laboratories test requisition form	
Test Request:	Enteric Pathogen Isolate Write " <i>Vibrio vulnificus</i> " in comment field on requisition form	
Transport:	Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments	
Integrity:	Pure isolate must be received	
Normal Value:	Negative for <i>Vibrio</i>	
Turnaround Time:	Up to 14 business days	

VIRAL HEMORRHAGIC FEVER (EBOLA, LASSA, MARBURG, ETC)

Lab & Phone #: Bioterrorism Response& Special Pathogens Lab (401) 222-5586

Organism Name: Ebola, Lassa, Marburg, etc.

Disease: Viral Hemorrhagic Fever

Description/Test: Testing is performed by CDC

Special Instructions: **ALL LABORATORIES MUST NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY AT (401) 222-2577/222-2432 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN A PHYSICIAN SUSPECTS VIRAL HEMORRHAGIC FEVER (VHF). DO NOT COLLECT SPECIMENS PRIOR TO CONSULTATION. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS.**

Specimen: Refer to the current version of the LRN Sentinel Protocol for Unknown Viruses for appropriate selection and collection of specimens for VHF testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: <http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html>
If, based on clinical history, VHF is suspected specimens are accepted only with preauthorization from HEALTH Division of Infectious Disease and Epidemiology. Consult with the Bioterrorism Response Lab (222-5586) for guidance on specimen selection, collection and transport. Specimens must be selected, collected and stored in strict accordance with LRN protocols.

Form Required: Rhode Island State Health Laboratory test requisition form
CDC DASH Form

Test Request: Special Pathogens Primary Specimen

Transport: Preauthorization is necessary prior to collecting and sending specimens. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for "Category A" infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for VHF agent suspected

Turnaround Time: Unknown (testing performed at CDC)

YERSINIA ENTEROCOLITICA

Lab & Phone #: Molecular Diagnostics & Enteric Pathogens (401) 222-5538

Organism Name: *Yersinia enterocolitica*

Disease: Yersiniosis

Description/Test: Genus and species identification of pathogenic isolates

Specimen: Pure isolate not more than 48 hours old on appropriate plated media sealed with parafilm or other appropriate barrier film is preferred. Appropriate tubed media is also acceptable.

Form Required: Rhode Island State Health Laboratories test requisition form

Test Request: Enteric Pathogen Isolate
Write "*Yersinia*" in comment field on requisition form

Transport: Within 24 to 48 hours of subculture at ambient (room) temperature 25° - 35° C

All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Molecular & Enteric Laboratory are available in all microbiology labs and laboratory send out departments

Integrity: Pure isolate must be received

Normal Value: Negative for *Yersinia*

Turnaround Time: Up to 14 business days

YERSINIA PESTIS

Lab & Phone #:	Bioterrorism Response/Special Pathogens Lab (401) 222-5586
Organism Name:	<i>Yersinia pestis</i>
Disease:	Plague (pneumonic, bubonic, septicemic)
Description/Test:	PCR and culture for detection and confirmation of <i>Y. pestis</i>
Special Instructions:	ALL LABORATORIES <u>MUST</u> NOTIFY THE DEPARTMENT OF HEALTH DIVISION OF INFECTIOUS DISEASE AND EPIDEMIOLOGY (401)222-2577 AND THE HEALTH BIOTERRORISM RESPONSE LABORATORY AT (401) 222-5586 IMMEDIATELY WHEN TEST IS ORDERED OR SPECIMEN/ISOLATE IS SUSPICIOUS FOR A POTENTIAL AGENT OF BIOTERRORISM. PREAUTHORIZATION IS NECESSARY PRIOR TO SENDING SPECIMENS OR ISOLATES.
Specimen:	<p>Refer to the current version of the LRN Sentinel Protocol for appropriate specimen selection and testing. This protocol is available in your microbiology laboratory and can also be accessed via the internet at: http://www.asm.org/index.php/policy/sentinel-level-clinical-microbiology-laboratory-guidelines.html</p> <p><u>Isolate</u>: If a lab is unable to rule out <i>Y. pestis</i> after performing LRN Sentinel screening tests, isolate is to be submitted on either a slant or a culture plate sealed with parafilm (or other appropriate barrier film). If based on clinical history there is a strong index of suspicion for plague, labs may be requested by HEALTH to submit the original culture plate on the initial day of isolation.</p> <p><u>Clinical Specimens</u>: If based on clinical history, plague is suspected, specimens are accepted for PCR testing. Submit original specimen on day of receipt. Consult with the HEALTH Bioterrorism Laboratory for appropriate specimen selection and submit original specimen as soon as possible after collection. Securely seal with parafilm or other appropriate barrier film and ship maintaining refrigerated temperature conditions by surrounding the internal shipping container with blue or wet ice.</p>
Form Required:	Rhode Island State Health Laboratories test requisition form
Test Request:	<p><u>Isolates</u>: Special Pathogens Bacterial Isolate</p> <p><u>Specimens</u>: Special Pathogens Primary Specimen</p> <p>Write "<i>Y. pestis</i>" in comment field of requisition form</p>

Transport: Preauthorization is necessary prior to sending primary specimens. All submissions must be properly packaged in accordance with current federal shipping regulations. Containers specifically labeled for transport of specimens and isolates to the HEALTH Bioterrorism Response & Special Pathogens Laboratory are available in all microbiology labs and laboratory send out departments. Shipments that meet the definition for “Category A” infectious substances as defined by federal regulation require additional packaging/labeling.

Normal Value: Negative for *Yersinia pestis*

Turnaround Time: PCR result within 24 hours
Isolate culture confirmation within 72 hours.